Extracts taken from DoD Directive 5000.2-R on environmental, safety and health considerations:

3.3.6 Environmental, Safety, and Health Considerations

The acquisition strategy shall include a programmatic environmental, safety, and health (ESH) evaluation. The PM shall initiate the ESH evaluation at the earliest possible time in support of a program initiation decision (usually Milestone I) and shall maintain an updated evaluation throughout the life-cycle of the program. The ESH evaluation describes the PM's strategy for meeting ESH requirements (see 4.3.7), establishes responsibilities, and identifies how progress will be tracked.

4.3.7 Environment, Safety, and Health

All programs, regardless of acquisition category, shall comply with this section and be conducted in accordance with applicable federal, state, interstate, and local environmental laws and regulations, Executive Orders (EOs), treaties, and agreements.

Environmental, safety, and health (ESH) analyses shall be conducted, as described below, to integrate ESH issues into the systems engineering process and to support development of the Programmatic ESH Evaluation (see 3.3.6).

4.3.7.1 National Environmental Policy Act

The PM shall comply with the National Environmental Policy Act (NEPA) (42 USC 4321-4370d), implementing regulations (40 CFR 1500-1508), and executive orders (EO 12114 and EO 11514 by analyzing actions proposed to occur in upcoming program phases that may require NEPA or EO analysis and providing the MDA with milestones and status for each planned analysis. Any analysis required under either NEPA or EO must be completed before the appropriate official may make a decision to proceed with a proposed action that may affect the quality of the human environment. NEPA and EO analysis is tied to proposed, program-specific actions. NEPA and EO documentation shall be prepared in accordance with DoD Component implementation regulations and guidance. The CAE is the final approval authority for system-related NEPA and EO documentation. The PM shall forward a copy of final NEPA documentation for ACAT I programs to the Defense Technical Information Center for archiving.

4.3.7.2 Environmental Compliance

Environmental regulations are a source of external constraints that must be identified and integrated into program execution. To minimize the cost and schedule risks that changing regulations represent, the PM shall regularly review environmental regulations and shall analyze the regulations and evaluate their impact on the program's cost, schedule, and performance.

4.3.7.3 System Safety and Health

The PM shall identify and evaluate system safety and health hazards, define risk levels, and establish a program that manages the probability and severity of all hazards associated with development, use, and disposal of the system. All safety and health hazards shall be managed consistent with mission requirements and shall be cost-effective. Health hazards include conditions that create significant risks of death, injury, or acute chronic illness, disability, and/or reduced job performance of personnel who produce, test, operate, maintain, or support the system.

Each management decision to accept the risks associated with an identified hazard shall be formally documented. The CAE shall be the final approval authority for acceptance of high risk hazards. All participants in joint programs shall approve acceptance of high risk hazards. Acceptance of serious risk hazards may be approved at the PEO level.

EO 12196 and DoDI 6055.1 make Federal Occupational Safety and Health Act regulations applicable to all federal employees working in non-military-unique DoD operations and workplaces, regardless of whether work is performed by military or civilian personnel. In the case of military-unique equipment, systems, operations, or workplaces, Federal safety and health standards, in whole or in part, apply to the extent practicable.

4.3.7.4 Hazardous Materials

The PM shall establish a hazardous material management program that ensures appropriate consideration is given to eliminating and reducing the use of hazardous materials in processes and products rather than simply managing pollution created (EO 12856). The selection, use, and disposal of hazardous materials shall be evaluated and managed so the DoD incurs the lowest cost required to protect human health and the environment over the system's life-cycle, consistent with the program's cost, schedule, and performance goals. Where a hazardous material use cannot be avoided, the PM shall plan for later material replacement capability in the system design, if technically feasible and economically practical and shall develop and implement plans and procedures for identifying, minimizing use, tracking, storing, handling, and disposing of such materials and equipment.

4.3.7.5 Pollution Prevention

In designing, manufacturing, testing, operating, maintaining, and disposing of systems, all forms of pollution shall be prevented or reduced at the source whenever feasible. Pollution that cannot be prevented shall be recycled in an environmentally safe manner. Pollution that cannot be prevented or recycled shall be treated in an environmentally safe manner. Disposal or other releases to the environment shall be employed only as a last resort and must be conducted in an environmentally safe manner. The PM shall establish a pollution prevention program to help minimize environmental impacts and the life-

cycle costs associated with environmental compliance. The PM shall identify the impacts of the system on the environment, wastes released to the environment, ESH risks associated with using new technologies, and other information needed to identify source reduction and recycling opportunities.

Many opportunities for pollution prevention can be incorporated into contract documents. In developing work statements, specifications, and other product descriptions, EO 12873 requires PMs to consider elimination of virgin material requirements, use of recovered materials, reuse of products, life-cycle cost, recyclability, use of environmentally preferable products, waste prevention (including toxicity reduction or elimination), and ultimately, disposal, as appropriate.